

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1-24. (Cancelled)

25. (Original) A matched set of golf clubs for a golfer, comprising a plurality of golf clubs, wherein each club has a length and a target distance, wherein a selected functional relationship exists over the plurality of clubs between the tempo when striking a ball with one of the clubs to produce the target distance for that club, and the length of that club.
26. (Original) The matched set of golf clubs of claim 25, wherein the tempo when striking a ball with each of the clubs to produce that club's target distance is the same.
27. (Original) The matched set of golf clubs of claim 25, wherein the selected functional relationship is a linear relationship.
28. (Original) The matched set of golf clubs of claim 25, wherein the selected functional relationship is a polynomial relationship.
29. (Original) The matched set of golf clubs of claim 25, wherein the selected functional relationship is a power-law relationship.
30. (Original) The matched set of golf clubs of claim 25, wherein a selected functional relationship exists over the plurality of clubs between
the perceived force when striking a ball with one of the clubs to produce the target distance for that club, and
the length of that club.

31. (Original) The matched set of golf clubs of claim 30, wherein the perceived force is measured by determining the centripetal force exerted along the shaft of the club at impact.
32. (Original) The matched set of golf clubs of claim 25, wherein the tempo is measured by determining the speed of the golfer's hands at impact.
33. (Original) The matched set of golf clubs of claim 25, wherein the lean angle of the clubs is optimized.
34. (Original) The matched set of golf clubs of claim 25, wherein the clubs have been designed by a computer-aided design method, and wherein the club have been manufactured by a computer-assisted manufacturing method.
35. (Original) A matched set of golf clubs for a golfer, comprising a plurality of golf clubs, wherein each club has a length and a target distance, wherein a selected functional relationship exists over the plurality of clubs between the perceived force when striking a ball with one of the clubs to produce the target distance for that club, and the length of that club.
36. (Original) A matched set of golf clubs for a golfer, comprising a plurality of golf clubs, wherein each club has a length and a desired ball trajectory, wherein a selected functional relationship exists over the plurality of clubs between the tempo when striking a ball with one of the clubs to produce the desired ball trajectory for that club, and the length of that club.
37. (Original) The matched set of golf clubs of claim 36, wherein the tempo when striking a ball with each of the clubs to produce that club's desired ball trajectory is the same.

38. (Original) The matched set of golf clubs of claim 36, wherein the selected functional relationship is a linear relationship.
39. (Original) The matched set of golf clubs of claim 36, wherein the selected functional relationship is a polynomial relationship.
40. (Original) The matched set of golf clubs of claim 36, wherein the selected functional relationship is a power-law relationship.
41. (Original) The matched set of golf clubs of claim 36, wherein a selected functional relationship exists over the plurality of clubs between the perceived force when striking a ball with one of the clubs to produce the desired ball trajectory for that club, and the length of that club.
42. (Original) The matched set of golf clubs of claim 41, wherein the perceived force is measured by determining the centripetal force applied along the shaft of the club at impact.
43. (Original) The matched set of golf clubs of claim 36, wherein the tempo is measured by determining the speed of the golfer's hands at impact.
44. (Original) The matched set of golf clubs of claim 36, wherein the lean angle of the clubs is optimized.
45. (Original) A matched set of golf clubs for a golfer, comprising a plurality of golf clubs, wherein each club has a length and a desired ball trajectory, wherein a selected functional relationship exists over the plurality of clubs between the perceived force when striking a ball with one of the clubs to produce the desired ball trajectory for that club, and the length of that club.